

Claims:

1. Modular electrical jack connector system comprising at least one jack connector housing (100, 101, 102) and at least one therein inserted jack connector-subassembly (200) wherein the jack connector housing (100, 101, 102) is formed for the purpose of modular adjacent stringing to at least one further jack connector housing and wherein each jack connector housing (100, 101, 102) comprises a front coupling side having at least two openings (110, 111) which openings (110, 111) are disposed one above the other for the purpose of receiving a variety of electrical plug connectors through the front coupling side and an oppositely disposed with respect to the front coupling side rear side (112) for the purpose of inserting at least one jack connector subassembly (200) wherein each jack connector subassembly (200) comprises a longitudinal strip-like carrier (250) having a substantially right-angled profile and having on the top and on the bottom respectively a series of extrusion-coated or injection-molded jack terminals (260) which extrusion-coated or injection-molded jack terminals (260) embody at a front end of the strip-like carrier uncoated and bent-back cantilevered contact portions (265, 266) which uncoated and bent-back cantilevered contact portions (265, 266) are disposed aligned in an upper opening (110) and/or into a lower opening (111) of the jack connector housing (100, 101, 102).

2. Jack connector system according to Claim 1 having a variety of modularly adjacently strung jack connector housings (100, 101, 102) wherein each jack connector housing is formed out of a plastic material and for the purpose of receiving respectively one jack connector subassembly (200).

3. Jack connector system according to one of the preceding claims wherein respectively one metallic shield (500) is

inserted between individual adjacently strung jack connector housings (100, 101, 102).

4. Jack connector system according to one of the preceding claims wherein the strip-like carrier (250) is modularly  
5 constructed out of two stackable carrier halves wherein each half comprises an extrusion-coated or injection-molded arrangement of jack terminals.

5. Jack connector system according to the preceding claim wherein a metallic shield plate (270) is disposed sandwich-  
10 like between two carrier halves.

6. Jack connector system according to one of the preceding claims wherein the extrusion-coating of the jack connectors up to the uncoated area of the contact portions (265, 256) forms a bump or knuckle-like thickening (269).

15 7. Jack connector system according to one of the preceding claims wherein the strip-like carrier modular is constructed out of two stackable identical carrier halves (251, 252) and wherein each carrier half respectively comprises a complementarily formed engaging device (253a, 253b, 254a,  
20 254b).

8. Jack connector system according to one of the preceding claims wherein for the purpose of signal conditioning the jack connector subassembly comprises correspondingly adapted component modules (280, 261) which correspondingly adapted  
25 component modules (280, 281) are disposed at least adjacently with respect to a top surface of the strip-like carrier.

9. Jack connector system according to one of the preceding claims wherein a variety of different conditioning component modules is connectable with the jack connector subassembly.

30 10. Jack connector system according to one of the preceding claims wherein the jack connector subassembly comprises a

variety of signal pins (220) which signal pins (220) extend outwards on one side.

11. Jack connector system according to one of the preceding claims wherein the jack connector subassembly comprises pins  
5 for an inline power supply.

12. Jack connector system according to one of the preceding claims wherein the jack connector subassembly comprises two separated carrier plates (210) and particularly printed  
10 circuit boards for the purpose of mechanically holding together the components and their electrical circuitry encompassed by the jack connector subassembly.

13. Jack connector system according to the preceding claim, wherein between the carrier plates (210) is disposed the strip-like carrier (250).

14. Jack connector system according to one of the two preceding claims wherein is disposed between the carrier plates (210) at least one electrical/electronic components encompassing box-type module (280, 281).

15. Jack connector system according to one of the three preceding claims wherein on the outside of the carrier plates  
20 are disposed electrical/electronic components (255).

16. Jack connector system according to one of the preceding claims wherein the jack connector subassembly is equipped with LED pins.

17. Jack connector system according to preceding claim  
25 wherein the jack connector subassembly comprises at least one right-angularly radiating LED (290) whose light is forwardly and outwardly guidable via a wave-guide (291) to the front coupling side.

18. Jack connector system according to the preceding claim wherein the jack connector housing is formed with guiding channels (180) for the purpose of receiving the wave-guide.

19. Jack connector system according to one of the preceding  
5 claims wherein the jack connector housing or housings is/are disposed on at least one earth plate (400) and particularly a printed circuit board which printed circuit board comprises openings (410) for the purpose of receiving the out of each jack connector subassembly guided signal pins (220).

10 20. Jack connector system according to the preceding claim wherein the earth plate (400) simultaneously carries further electrical/electronic components.

21. Jack connector system according to one of the two preceding claims wherein the earth plate (400) comprises a  
15 sandwich-like multi-layered composite structure.

22. Jack connector system according to one of the preceding claims wherein the jack connector housing or housings is or are encompassed by an external shield housing (300).

20 23. Jack connector system according to the preceding claim wherein each inserted jack connector-subassembly (200) is directly soldered to the external shield (300).

24. Jack connector system according to one of the two preceding claims wherein the external shield is constructed  
25 in two portions wherein the first portion (315) is attachable to said jack connector housing from the front coupling side of the jack connector housing and wherein the second shield portion (320) is solderable to the first portion (315) and is attachable to the jack connector housing from the rear side  
30 of said jack connector housing.

25. Jack connector system according to one of the preceding claims wherein for the purpose of stringing together the jack connector housings said jack connector housings comprise respectively complementarily developed fastening devices  
5 (115, 116).
26. Jack connector system according to one of the preceding claims wherein at least intermediately strung and/or stringable jack connector housings (100) are identically constructed.
- 10 27. Jack connector housing (100, 101, 102) for a modular electrical jack connector system according to one of the preceding claims wherein the jack connector housing is modularly stringable and connectable to at least one further such jack connector housing.
- 15 28. Jack connector-subassembly (200) for a modular electrical jack connector system according to one of the preceding claims characterised by a longitudinal strip-like carrier (250) comprising a substantially right-angled profile and having on the top and on the bottom respectively a series of  
20 extrusion-coated or injection-molded jack terminals (260) which extrusion-coated or injection-molded jack terminals (260) embody at a front end of the strip-like carrier uncoated and bent back cantilevered contact portions (265, 256) which uncoated and bent back cantilevered contact  
25 portions (265, 256) are alignable in an upper opening (110) and/or in a lower opening (111) of a jack connector housing.
29. Longitudinal strip-like carrier (250) comprising a substantially right-angled profile and having on the top and on the bottom respectively a series of extrusion-coated or  
30 injection-molded jack terminals which extrusion-coated or injection-molded jack terminals embody at a front end of the strip-like carrier uncoated and bent back cantilevered

contact portions particularly for a modular electrical jack connector system according to one of the preceding claims.

30. Longitudinal strip-like jack terminal carrier for a modular electrical jack connector system according to one of the preceding claims wherein the strip-like carrier (250) is modularly constructed out of two stackable identical carrier halves (251, 252) and wherein each carrier half respectively comprises complementary engaging means (253a, 253b, 254a, 254b).